Proceedings of the Iowa Academy of Science

Volume 46 | Annual Issue Article 34

1939

The Construction and Use of a Concave Grating Spectrograph

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of moisture, but within the temperature ranges studied, we feel justified in stating that the solvating power of anhydrous magnesium bromide is not a function of its preparation temperature.

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THE CONSTRUCTION AND USE OF A CONCAVE GRATING SPECTROGRAPH

W. C. OELKE AND GEORGE MONTROSS

In order to learn some of the fundamentals of analytical spectrography, a concave grating spectrograph was constructed as a cooperative student-faculty project. Details of construction and methods of use were given. Both qualitative and quantitative applications of the instrument are considered.

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A QUANTITATIVE SPECTROGRAPHIC STUDY ON THE EFFECTS OF THE ALKALI METALS UPON THE DETERMINATION OF CALCIUM

LOUIS WALDBAUER AND JOHN A. MEANS

It has been known for some time that in spectrographic analysis each element present has some effect upon the other elements present. Our investigation of the effect of the alkali metals on calcium showed that, in general, the intensity of the spectral lines of calcium increased with an increase in the percentage of the alkali metal present. However, there is a decrease in the intensifying effect at the higher concentrations. The chlorides of the alkali metals used were in concentrations varying from 1.0 per cent to 0.031 per cent, and the concentrations of the calcium solutions used varied approximately over the same range. Slides were